

MATERIAL SAFETY DATA SHEET
TRIMETHYLSILYL TRIFLUOROACETATE >96%

Section 1 - Chemical Product and Company Identification

MSDS Name:	TRIMETHYLSILYL TRIFLUOROACETATE >98%
Catalog Numbers:	9.131
Synonyms:	Trifluoroacetic acid trimethylsilyl ester
Relevant identified uses of substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Manufacture of substances
Company Identification:	Tau-Chem, Ltd. Nobelova 34, P.O. Box 29 836 05 Bratislava, Slovak Republic Phone: +421 2 44 452 252 Fax: +421 2 44 457 645
POISON CENTER:	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
Emergency Numbers Slovakia:	Phone: +421 2 54 774 166 Fax: +421 2 54 774 605


Section 2 - Hazards Identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Flammable liquids (Category 2)
Skin Corrosion (Category 1B)

According to European Directive 67/548/EEC as amended.
Highly flammable. Causes burns. Irritating to respiratory system.

Labeling according to Regulation (EC) No 1272/2008 [CLP]

Label elements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call A POISON CENTER or doctor/physician.

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

According to European Directive 67/548/EEC as amended



Hazard symbol(s)

F Flammable

C Corrosive

R-phrase(s)

R11 Highly flammable.

R34 Causes burns.

R37 Irritating to respiratory system.

S-phrase(s)

S16 Keep away from sources of ignition - No smoking.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible).

Other hazards None.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
400-53-3	TRIMETHYLSILYL TRIFLUOROACETATE	>96	206-923-7

Classification Flam. Liq. 2; Skin Corr. 1B
H225, H314
F, C; R11 - R34 – R37

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 – First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 – Fire Fighting Measures

Suitable extinguishing media:	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Special protective equipment for fire-fighters:	Wear self contained breathing apparatus for fire fighting if necessary.
Further information:	Use water spray to cool unopened containers.

Section 6 – Accidental Release Measures

Personal precautions:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions:	Prevent further leakage or spillage if safe to do. Do not let product enter drains.
Methods and materials for containment and cleaning up	Contain spillage and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations. (See section 13)

Section 7 – Handling and Storage

Precautions for safe handling:	Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
Conditions for safe storage:	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store under inert gas. Moisture sensitive.

Section 8 – Exposure Controls, Personal Protection

Exposure controls:	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	
Eye/face protection	Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body Protection	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory	Where risk assessment shows air-purifying respirators are appropriate use a

protection full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9 – Physical and Chemical Properties

Appearance

Form: Clear, Liquid

Colour: Colourless

Safety data:

pH Not available

Vapour density: 6,43 - (Air = 1.0)

Melting Point: Not available

Boiling Point: 88 - 90 °C - lit.

Flash Point: 13 °C - closed cup

Ignition temperature: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Solubility in water: Not available

Density: 1,078 g/mL at 25 °C

Refractive Index: Not available

Molecular Formula: $C_5H_9F_3O_2Si$

Molecular Weight: 186.2 g/mol

Section 10 – Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.

Conditions to Avoid: Heat, flames and sparks.

Extremes of temperature and direct sunlight.

Materials to avoid: Oxidizing agents, acids, Bases, Reducing agents

Hazardous Decomposition Products Hazardous decomposition products under fire conditions:
Carbon oxides, Hydrogen fluoride, silicon oxides

Section 11 – Toxicological Information

Acute toxicity No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity: No data available

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity:	No data available
Specific target organ toxicity – single exposure	No data available
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	May be harmful if swallowed. Causes burns.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.
Signs and Symptoms of Exposure	
	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, Shortness of breath, Headache, Nausea
Additional Information	
	RTECS: Data not available.

Section 12 – Ecological Information

Toxicity:	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	No data available
Other adverse effects	No data available

Section 13 – Disposal Considerations

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging	Dispose of as unused product.

Section 14 – Transport Information

	IATA	IMDG	RID/ADR
Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S.	CORROSIVE LIQUID, TOXIC, N.O.S.	CORROSIVE LIQUID, TOXIC, N.O.S.
Hazard Class:	8 (6.1)	8 (6.1)	8 (6.1)
UN Number:	2922	2922	2922
Packing Group:	II	II	II
		Marine pollutant: No	

Section 15 – Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

Section 16 – Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Flam. Liq.	Flammable liquid.
Skin Corr.	Skin corrosion.
H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage
F	Highly flammable.
C	Corrosive
R11	Highly flammable.
R34	Causes burns.
R37	Irritating to respiratory system.

MSDS Creation Date: 14/06/2011

Revision #0 Date:

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Disclaimer: The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.